

REMARKS

The applicants have carefully considered the Office action dated November 12, 2009. By way of this response, the title of the application has been amended, claims 1, 4, 6-16, and 18-20 have been amended, and claims 2, 17, 22-30, 63, 64, 68 and 71 have been cancelled without prejudice to their further prosecution. It is respectfully submitted that no new matter has been introduced via the amendments and that all pending claims are fully supported by the originally filed specification. For example, at least pages 11-14, 26-34, 48 and 49 of the originally filed specification (PCT applicaton No. PCT/EP03/50768) describe depositing a hydrophobic material on a substrate to define a region, and depositing a liquid on the substrate, wherein a hydrophobic/hydrophilic interaction between the hydrophobic material and the liquid conforms the liquid to the defined region. Although for the convenience of the Examiner the applicants have identified example specification support for the above amendments, the identification of this support is not an indication that the noted sections of the specification are to be read into the claims. On the contrary, "Claims subject to examination are given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read into the claims." In re Yamamoto, 740 F.2d 1569, 222 U.S.P.Q. 934, 936, 937 (C.C.P.A. 1984). "Generally, particular limitations or embodiments appearing in the specification are not to be read into the claims." E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988).

In view of the following, it is respectfully submitted that all pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

Rejections under 35 U.S.C. § 112, ¶1

The Office action of November 12, 2009 rejected claims 1-20, 22-30, 63, 64, 68, 71, 74 and 75 under 35 U.S.C. §112, ¶1 as failing to comply with the written description requirement because “the claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” The Office asserts that “the applicant’s originally filed specification does not explicitly nor inherently state that the nanoparticles *consist* only [of] silicon element or germanium element.” The applicants respectfully *traverse* these rejections. However, because claim 1 has been amended by way of this response to recite the nanoparticles *comprising* at least one of silicon or germanium, the applicants respectfully submit that the rejections under 35 U.S.C. §112, ¶1 are rendered moot. Accordingly, withdrawal of the rejections under 35 U.S.C. §112, ¶1 is respectfully requested. However, the applicants hereby expressly reserve the right to reintroduce one or more claims using the “consisting of” language, if desired, in this or a future continuing application.

Rejections under 35 U.S.C. § 102(b) and § 103(a)

The Office action of November 12, 2009 rejected claims 1-20, 22-30, 63, 64, 68, 71 and 74-75 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Yudasaka et al. (EP 1085578); and rejected claims 1-20, 22-30, 63, 64, 68, 71 and 74-75 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Furusawa et al. (WO 00/59044 – U.S. Patent No. 6,518,087). The applicants respectfully traverse these rejections.

Independent claim 1 recites, among other things, depositing a hydrophobic material on a substrate to define a region, and depositing a liquid on the substrate, wherein a

hydrophobic/hydrophilic interaction between the hydrophobic material and the liquid conforms the liquid to the defined region. Neither Yudasaka, Furusawa, nor their combination, teaches or suggests a hydrophobic material to conform the liquid to a defined region.

Yudasaka describes manufacturing a thin film transistor by applying a silicon compound solution using an ink-jet method (Yudasaka, ¶65). However, Yudasaka does not appear to teach or suggest any use of hydrophobic materials. Accordingly, claim 1 and all claims depending therefrom are allowable over Yudasaka.

Furusawa describes manufacturing a solar battery by applying a silicon compound solution using an ink-jet method (Furusawa, col. 12 lines 39-51). However, Furusawa does not appear to teach or suggest any use of hydrophobic materials. Accordingly, claim 1 and all claims depending therefrom are allowable over Furusawa.

Because neither Yudasaka nor Furusawa teaches or suggests depositing a *hydrophobic material* on a substrate to define a region, and depositing a liquid on the substrate, wherein a hydrophobic/hydrophilic interaction between the *hydrophobic material* and the liquid conforms the liquid to the defined region, no combination of Yudasaka and Furusawa teaches or suggests the method of claim 1. Accordingly, claim 1 and all claims depending therefrom are allowable over Yudasaka and Furusawa, and favorable reconsideration is respectfully requested.

Before closing, the applicants note that at least the following amendments are either broadening or clarifying and, thus, not necessary for patentability:

1. The replacement of “carried out” with “performed” in claims 4, 7, 8 and 9;
2. The replacement of “and/or” with “at least one of “ in claims 4 and 9.
3. The deletion of “step” in claims 7-10 and 16.
4. The deletion of “or the like” in claim 9.

5. The deletion of “predetermined” in claim 10.
6. The replacement of “which stabilizes the nanoparticles in suspension” with “to stabilize the suspension of the nanoparticles in the liquid” in claim 12.
7. The deletion of “such as polyethylene glycol (MW 200)” in claim 13.
8. The replacement of “wherein at least one dimension of the area on the substrate to be occupied by the nanoparticles is selected using a prior step of printing” with “further comprising depositing the hydrophobic material using a printing process” in claim 15.
9. The deletion of “soft contact” in claim 16.
10. The replacement of “is” with “comprises” in claim 16.
11. The replacement of “is” with “comprises” in claim 18.
12. The deletion of “or similar hydrophobic material” in claim 18.

The above noted amendments are either broadening, or are merely clarifying in that the amended claims are intended to state the same thing as the claim was intended to state prior to amendment (i.e., to have the same scope both before and after the amendments). Consequently, these broadening or clarifying amendments do not give rise to prosecution history estoppel or limit the scope of equivalents of the claims under the doctrine of equivalents.

In general, the Office action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the applicants will not address such statements at the present time. However, the applicants expressly reserve the right to challenge such statements in the future (e.g., in the appeal that is about to be filed).

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

If the Examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is invited to contact the undersigned at the number identified below.

Please direct all correspondence for this matter to the address associated with USPTO Customer Number 22879.

Respectfully submitted,

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